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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,757	03/24/2004	Robert C. Meier	72255/00003	4297
23380 7590 02/06/2007 TUCKER, ELLIS & WEST LLP 1150 HUNTINGTON BUILDING 925 EUCLID AVENUE CLEVELAND, OH 44115-1414			EXAMINER AJAYI, JOEL	
			ART UNIT 2617	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/807,757

Applicant(s)

MEIER, ROBERT C.

Examiner

Joel Ajayi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 10-14, 18, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Murayama et al. (U.S. Patent Application Number: 2004/0123011)** in view of **Perloff et al. (U.S. Patent Application Number: 2003/0061533)**, and further in view of **Vij et al. (U.S. Patent Number: 6452910)**.

Consider **claim 1**; Murayama clearly discloses a master switch, the master switch including an associated plurality of master switch wireless modules, each of plurality of master switch wireless modules including means for selectively broadcasting an associated connection signal (paragraph 5, line 1 – paragraph 6, line 4; paragraph 9, lines 1-10; paragraph 20, lines 1-7; paragraph 99, lines 1-3).

A slave switch, the slave switch including an associated plurality of slave switch wireless modules, each of the plurality of slave switch wireless modules including means for receiving one associated connection signal and means for establishing a wireless data communication link with a master switch broadcasting the associated connection signal after receipt thereof (paragraph 5, line 1 – paragraph 6, line 4; paragraph 9, lines 1-10; paragraph 20, lines 1-7; paragraph 99, lines 1-3).

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Except:

A master switch aggregation port associated with the master switch, the master switch aggregation port being in data communication with each of the plurality of master switch wireless modules, the master switch aggregation port including means for selectively routing data among the plurality of master switch wireless modules.

A slave switch aggregation port associated with the slave switch, the slave switch aggregation port being in data communication with each of the plurality of slave switch wireless modules, the slave switch aggregation port including means for selectively routing data among the plurality of slave switch wireless modules.

In the same field of endeavor Perloff clearly discloses a master switch aggregation port associated with the master switch, the master switch aggregation port being in data communication with each of the plurality of master switch wireless modules, the master switch aggregation port including means for selectively routing data among the plurality of master switch wireless modules (paragraph 20, lines 1-16; paragraph 49, lines 3-24; paragraph 55, lines 1-11).

A slave switch aggregation port associated with the slave switch, the slave switch aggregation port being in data communication with each of the plurality of slave switch wireless modules, the slave switch aggregation port including means for selectively routing data among the plurality of slave switch wireless modules (paragraph 20, lines 1-16; paragraph 49, lines 3-24; paragraph 55, lines 1-11).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Perloff into the method of Murayama in

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order to provide a system and method, which allow any link aggregation device to transparently connect aggregated links to a pair of devices supporting multi-device link aggregation as if the common link aggregation device is merely connecting to a single device.

Murayama and Perloff clearly disclose the claimed invention except:

A method of wireless bridging between networks.

In the same field of endeavor Vij clearly discloses wireless bridging between networks (column 2, lines 15-37).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Vij into the method of Murayama and Perloff in order to enable seamless, two-way transmission between a plurality of wireless, personal area network devices and a wireless local area network.

Consider **claim 10**; Murayama clearly discloses selectively routing data among a plurality of master and slave switch wireless modules associated with a master and slave switch; selectively broadcasting a connection signal from each of the plurality of master switch wireless modules; receiving one associated connection signal into each of a plurality of slave switch wireless modules associated with a slave switch; establishing at least one wireless data communication link between master switch modules broadcasting the associated connection signal and an associated one of the plurality of slave switch wireless modules after receipt of the connection signals (paragraph 5, line 1 – paragraph 6, line 4; paragraph 9, lines 1-10; paragraph 20, lines 1-7; paragraph 99, lines 1-3).

Except:

Using switch aggregation port.

In the same field of endeavor Perloff clearly uses switch aggregation ports (paragraph 20, lines 1-16; paragraph 49, lines 3-24; paragraph 55, lines 1-11).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Perloff into the method of Murayama in order to provide a system and method, which allow any link aggregation device to transparently connect aggregated links to a pair of devices supporting multi-device link aggregation as if the common link aggregation device is merely connecting to a single device.

Murayama and Perloff clearly disclose the claimed invention except:

A method of wireless bridging between networks.

In the same field of endeavor Vij clearly discloses wireless bridging between networks (column 2, lines 15-37).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Vij into the method of Murayama and Perloff in order to enable seamless, two-way transmission between a plurality of wireless, personal area network devices and a wireless local area network.

Consider **claims 2 and 11**; the combination above clearly discloses that each aggregation port includes means for detecting a loss of at least one connection signal, and wherein the means for selectively redirecting is activated in accordance with an output thereof (Perloff, paragraph 9, lines 1-16).

Consider **claims 3, 4, and 12**; the combination above clearly discloses the means for balancing data flow among at least one of the plurality of master wireless switch modules (Perloff, paragraph 9, lines 1-16).

Consider **claims 5 and 13**; the combination above clearly discloses the means for transmitting data via radio frequency transmission (Perloff, paragraph 22, lines 20-32).

Consider **claims 6, 14, and 23**; the combination above clearly discloses that the aggregation ports operate in connection with a selected port aggregation protocol (Perloff, paragraph 20, lines 1-16; paragraph 23, lines 1-15).

Consider **claims 18 and 21**; the combination above clearly discloses that the connection signal further comprises a beacon signal wherein the beacon signal includes a service set identifier identifying at least one of the plurality of master wireless modules having a service set identifier matching a service set identifier of at least one of the plurality of slave wireless modules (paragraph 5, line 1 – paragraph 6, line 4; paragraph 9, lines 1-10; paragraph 20, lines 1-7; paragraph 25, lines 1-7; paragraph 99, lines 1-3).

Claims 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Murayama et al. (U.S. Patent Application Number: 2004/0123011)** in view of **Perloff et al. (U.S. Patent Application Number: 2003/0061533)**, in view of **Vij et al. (U.S. Patent Number: 6,452,910)**, and further in view of **Kanuri et al. (U.S. Patent Number: 6,807,179)**.

Consider **claims 7 and 15**; Murayama, Perloff, and Vij clearly disclose the claimed invention except that the port aggregation protocol is at least one of a Cisco Port Aggregation Protocol and an IEEE 802.1 ad port aggregation protocol.

In the same field of endeavor Kanuri clearly discloses that the port aggregation protocol is at least one of a Cisco Port Aggregation Protocol and an IEEE 802.1 ad port aggregation protocol (Kanuri, column 1, lines 43-60).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Kanuri into the method of Murayama, Perloff, Vij in order to switch data packets between subnetworks.

Claims 8, 9, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Murayama et al. (U.S. Patent Application Number: 2004/0123011)** in view of **Perloff et al. (U.S. Patent Application Number: 2003/0061533)**, in view of **Vij et al. (U.S. Patent Number: 6,452,910)**, and further in view of **Aoyagi (U.S. Patent Number: 6,901,275)**.

Consider **claims 8, 9, 16, and 17**; Murayama, Perloff, and Vij clearly disclose the claimed invention except the means for establishing a weighting value associated with alternative data communication paths between a selected master wireless module and at least two of the plurality of slave switch wireless modules; and wherein the means for establishing a wireless data communication link includes means for selectively establishing the wireless data communication between the selected master wireless module and a selected slave switch wireless module, in which selection is made in accordance with the weighting value.

In the same field of endeavor Aoyagi clearly discloses the means for establishing a weighting value associated with alternative data communication paths between a selected master wireless module and at least two of the plurality of slave switch wireless modules; and wherein the means for establishing a wireless data communication link includes means for selectively establishing the wireless data communication between the selected master wireless module and a selected slave switch wireless module, in which selection is made in accordance with the weighting value (abstract, column 2, lines 18-29; column 8, line 60 – column 9, line 3).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Aoyagi into the method of Murayama, Perloff, and Vij in order to provide a communication system for performing data communication between one master unit and a plurality of slaves.

Claims 19, 20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Murayama et al. (U.S. Patent Application Number: 2004/0123011)** in view of **Perloff et al. (U.S. Patent Application Number: 2003/0061533)**, in view of **Vij et al. (U.S. Patent Number: 6,452,910)**, and further in view of **Shida et al. (U.S. Patent Number: 6,014,406)**.

Consider **claims 19, 20, and 22**; Murayama, Perloff, and Vij clearly disclose the claimed invention except that the service set identifier is an IEEE 802.11 service set identifier and the beacon is at least one of an 802.11 Beacon and an 802.11 Probe Response.

In the same field of endeavor Shida clearly discloses that the service set identifier is an IEEE 802.11 service set identifier and the beacon is at least one of an 802.11 Beacon and an 802.11 Probe Response (abstract, column 1, lines 35-44; column 7, lines 27-35).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Shida into the method of Murayama, Perloff, and Vij in order to provide a wireless communication system and a mobile wireless terminal arranged such that wireless communication equipment functioning as a master station is determined automatically from among a plurality of wireless communication equipment constituting the communication system.

Conclusion

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

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Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joel Ajayi whose telephone number is (571) 270-1091. The Examiner can normally be reached on Monday-Friday from 7:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Joel Ajayi

January 31, 2007

A handwritten signature in black ink that reads "Nick Corsaro". The signature is written in a cursive, flowing style.

NICK CORSARO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600